Counting Persons in Poverty on the Current Population Survey

This paper explains differences between the counts of persons in poverty as published by the Census and the counts one gets when doing a simple tabulation of the public use CPS file.

The March 1997 CPS (Table 1) shows 36.5 million persons in poverty in 1996 according to the Bureau of the Census. This represents 13.7% of a total population of 266.22 million persons. Analysts who tabulate the CPS to arrive at persons in families whose income is less than the poverty threshold without adjustment, however, will get neither the same number of persons in poverty nor the same total population. Rather, depending upon how they tabulate the file, they will get a larger total population and as many as 11% more persons in poverty. This article explains the two reasons for the differences: the treatment of children under 15 who are unrelated to anyone else in the household in which they live and the treatment of families containing subfamilies.

As Table 1 shows, the analyst who tabulates the file in a relatively straightforward manner will get a total population of 266.79 million persons. This is the same as the Census total for non-poverty purposes, but 570,000 more than the Census

total population for poverty purposes.[2] This 570,000 person disparity is the population of children under 15 who live in households, but are unrelated to anyone else in those households.

By definition, these children have no income since persons under 15 are not asked about their income. Yet, they tend to live in families which are not poor. Census resolves the problem of these children by omitting them from the poverty group and from the population when any tabulation involves a poverty count.

TABLE 1: Poverty Counts (millions of persons)	
Census Values:	
Total Population for Poverty Purposes	266.22
+ Unrelated Children under 15 in Households	.57
Total Population for Non-Poverty Purposes	266.79
In Poverty, Census	36.53
+ Unrelated Children under 15 in Households	.57
+ Family Definition	3.49
In Poverty, simple tabulation from the file	40.59

SOURCE: ASPE and Census Tabulations.

HHS has always included them in its count of persons in poverty and in the total population on the grounds that about 40% of them are foster children placed with the family by the local social service agency. Thus while the family is not poor, these children were poor when they were placed with the family and probably will again be poor after they return to their birth parents. The number of persons in poverty in HHS tabulations is 37.1 million, 570,000 more than the Census number. In HHS tabulations, there are 13.9% in

poverty, compared to the 13.7% published by Census.

Family Structure and Poverty

A second difference between the poverty population as shown by Census and that which one gets when tabulating the file without adjustment is the treatment of families containing subfamilies. A subfamily exists when three or more related persons live together and some of them are married or more than one generation apart. For example, a married couple whose 16-year-old daughter and her 6-month-old child live with them would be a primary family with four members. In addition the younger mother and her child would constitute a related subfamily. In our example all the family's income is earned by the married couple.

If one counts the subfamily as part of the primary family (as Census does), the entire family is likely to have income higher than the poverty level and no one in the family would be counted as being in poverty. If one counts the subfamily as having its own income, our example younger subfamily will be in poverty since its income is zero.

The Census file shows as the family income of each primary family the total income including that of the subfamily. The family income of the subfamily includes only that of the members of the subfamily. Thus some relatively small number of primary families would be in poverty if their family income excluded the subfamily members' income. But they appear not to be in poverty because subfamily members incomes' are included. In addition, the poverty threshold on the file pertains only to the family size of the (larger) primary families and is thus too high for subfamilies. An analysis based on simply dividing income by poverty level will show about 4 million (11%) more persons in poverty than Census shows. This results because the income of subfamilies tends to be low, because the poverty level is set for families including the subfamily members, and because unrelated children in households are included. By this definition, 15.3% of the population is in poverty, compared to 13.7%.

Children Under Age 18

Of more current policy interest are estimates of children under age 18 in poverty. In March 1997,

according to Census tabulations of the CPS which do not involve poverty (Table 2), the population included 71.22 million children.[3] Again, 570,000 of them were unrelated children under age 15 in households. Therefore in its poverty calculations, Census indicates that there were only 70.65 million children.[4]

TABLE 2: Child Poverty Counts (millions of persons)	
Census Values:	
Total Population for Poverty Purposes	70.65
− Unrelated Children under 15 in Households	.57
Total Population for Non-Poverty Purposes	71.22
In Poverty, Census	14.46
− Unrelated Children in Households	.57
− Family Definition	1.80
In Poverty, simple tabulation from the file	16.83

SOURCE: ASPE and Census Tabulations.

The number of children in poverty is 14.46 million if these unrelated children are left out.[5] It is 15.03 million if they are included.[6] Using subfamily income to determine poverty would increase the number of children in poverty to 16.83 million.[7] An unadjusted tabulation of the CPS file will produce 2.37 million (16%) more children in poverty than Census shows in its poverty document. By this definition, 24% of children are in poverty, compared to 20%.

Notes

1. Lamison-White, Leatha, U.S. Bureau of the Census, Current Publication Reports, Series P60-198, Poverty in the United States, 1996, U.S. Government Printing Office, Washington, DC, 1997, Pages vii and 2.

2. Census Health Insurance Table A from www.census.gov/hhes/hlthins, September 29, 1997.

3. Census Health Insurance Table B from the Census web site, September 29, 1997.

4. P60-198, Page 2.

5. P60-198, Page vii.

6. ASPE tabulation.

7. ASPE tabulation.